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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,055	04/02/2004	Yves R. Hoarau	HOARAU-01	2228

7590 10/31/2006  
John M. Macaulay  
2324 Temple Drive  
Davis, CA 95616

EXAMINER

STOKES, CANDICE CAPRI

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/817,055

Applicant(s)

HOARAU ET AL.

Examiner

Candice C. Stokes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 42-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-56 is/are allowed.
- 6) ☒ Claim(s) 1-25, 44 and 48 is/are rejected.
- 7) ☒ Claim(s) 42, 43, 45-47 and 49-52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1) Claims 1-10,13-20,23,25,44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes et al. Barnes et al disclose an intraoral data input tool 100, said tool comprising: a handle 114, and a head 118 attached to a first end of said handle 114, said head 118 including a data input device 100, said data input device 100 being responsive to force applied by a stylus 122, said head 118 being configured to allow a dental examiner to input data using said stylus on said input device when said head is positioned at least partially within said patient's mouth. In an alternate embodiment, Barnes et al shows handle (H), as shown in Figure 8 (copied below for clarification), being generally cylindrical, the diameter of the handle being much smaller than the length of the handle, said handle being capable of being held in between the thumb and first and second fingers of a dental examiner's hand. Figure 8 also shows a head (HE), which is generally flat and thin. This also anticipates Claim 16. As to Claim 4, the data input device 110 comprises a multiplicity of push buttons 128,132,134. Regarding Claims 6-8, the data input device 110 comprises a touch sensitive display 110 (see column 4, lines 43-47); the screen 110 acts as a mirror; and the multiplicity of push buttons 128,132,134 are located peripherally about said mirror. With respect to Claim 10, the screen 110 is also considered a display. As to Claim 14, the tool 100 further comprises an electrical connector 210 (as shown in

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Figure 2) attached to a second end of said handle 114, and an electrical cable 212 connecting said electrical connector 210 to said data input device 110. Regarding Claims 15 and 17, the stylus 122 is capable of functioning as a dental probe. As to Claim 18, the system 100 further comprises a controller 214 with an operating program, said controller 214 being linked to said intraoral data input tool 110 by a communication means. Regarding Claim 19, the communication means comprises an electrical cable as shown in Figure 2 hanging from the bottom of the device 100. Barnes et al also disclose a dental data input system 100 wherein said communication means is a wireless communication means 123. To Claims 23 and 25, the dental input system 100 comprises a display 110 electrically connected to the controller 214; and a keyboard or auxiliary input device 128,132,134 electrically connected to the controller 214. Obviously there is some sort of operating program within this device. To claim 48, push buttons (128,132,134) display (110) is touch sensitive (see column 4, lines 43-47). Barnes et al does not teach the largest dimension of the head being 2.5 centimeters as in the amended version of claim 1 or as to claim 44, the length of the handle being approximately 13 centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the dimension and length as claimed, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

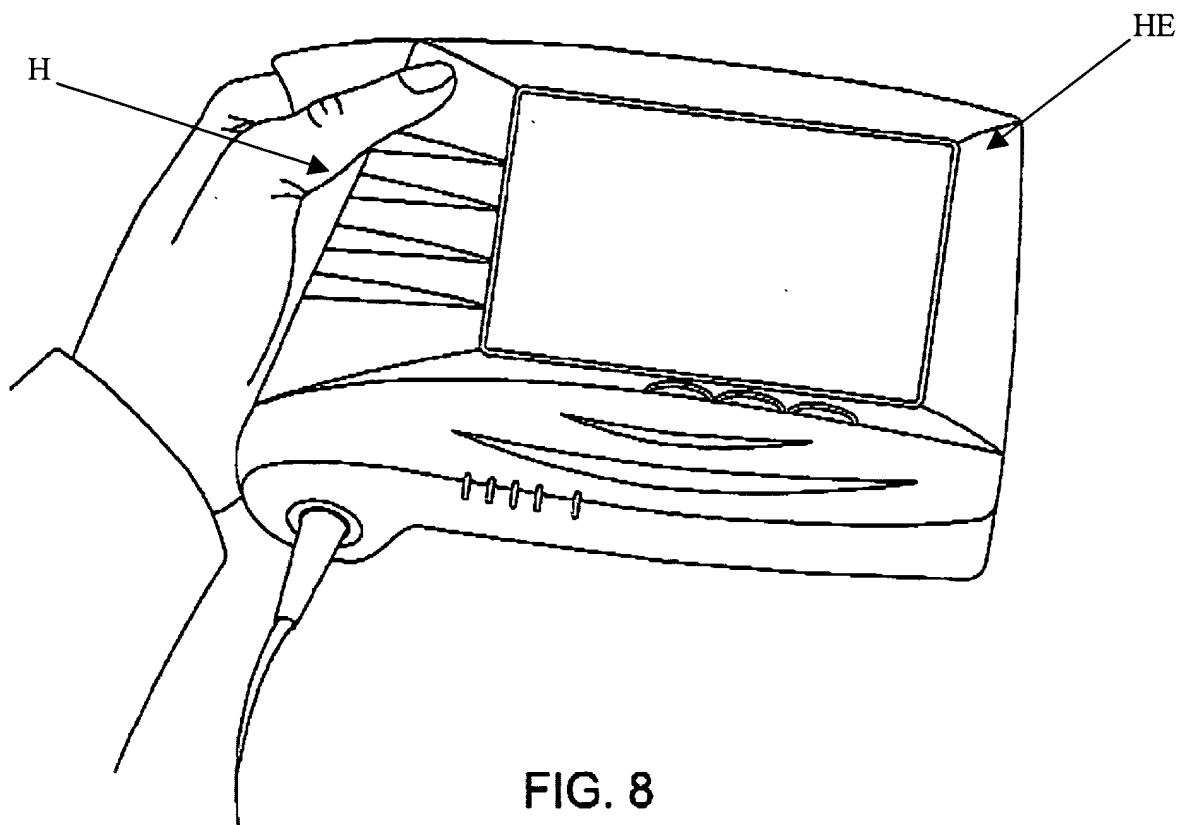


FIG. 8

As to claims 2,5,9,13, and 48 Barnes et al disclose the claimed invention except for the discoid head. It would have been an obvious matter of design choice to manufacture the head of the device having a discoid shape, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. Further to claim 9, head (118) obviously has a first and second parallel flat surfaces, otherwise display (110) would be held in a slanted orientation.

To claim 3, Barnes et al teach an extrusion (128) rigidly attached to the head. The language “configured to allow the dental examiner to place one or more fingers of the stylus being hand against said extrusion to provide extra stability when inputting data with the stylus” is a recitation of intended use. A recitation of the intended use of the claimed invention must

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result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

As to Claim 5, Barnes et al disclose the claimed invention except for the buttons being sized in the range of 1 to 2 square millimeters. It would have been an obvious matter of design choice to manufacture the head of the device having a size within this range, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Further regarding Claim 13, Barnes et al disclose the claimed invention except for the wireless communication device being within the handle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to enclose the wireless communication device within the handle, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

2) Claims 11-12 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes et al in view of Jung et al (US 2003/0156283). Barnes et al disclose the claimed invention except for the translucent disposable cover and dental operating programs. Jung et al disclose the use of a translucent cover 50 to protect the device. Further Jung et al teach a dental operating program as shown in Figures 9A and 9B. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the disposable cover and dental operating program as taught by Jung et al into the device of Barnes et al in order to

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protect the device from dust or other foreign particles when not in use and the dental program or any program could be adapted into any device that holds or reads data.

Regarding Claim 12, Barnes et al discloses a clamp 116 which could be used to hold a cover onto the device to prevent it from easily slipping off.

3) Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes et al in view of Mattson et al (USPN 5,303,148). Barnes et al disclose the claimed invention except for the voice synthesizer. Mattson et al teach a voice synthesizer which “audibilizes text or word information, as well as word information components to machine signals, in language designated by the language code” (column 5, lines 17-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the voice synthesizer as taught by Mattson et al into the device disclose by Barnes et al in order to provide an additional auxiliary feature that allows the operator to input information without the use of the buttons or stylus.

#### ***Allowable Subject Matter***

Claims 53-56 are allowed.

Claims 42-43,45-47,49-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose or reasonably teach an intraoral data input tool with a head comprising a rigid pan; circuit board positioned within the pan; a mirror positioned with the central cutout of

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the circuit board; and a flexible plastic cover positioned over the mirror and circuit board in combination with the limitations of claim 1.

### ***Response to Arguments***

Applicant's arguments filed 07/31/06 have been fully considered but they are not persuasive. In response to Applicant's arguments the rejection has been modified for clarifications. The bulk of Applicant's arguments are directed toward the patentability of the present invention and "comfort", "size", and "shape" of the device. These limitations do not distinguish over the Barnes et al reference because the same features are present for data input in the medical industry and one of ordinary skill in the art who wants to do similar data input in dentistry, would obviously incorporate the features of the Barnes et al device.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candice C. Stokes whose telephone number is (571) 272-4714.

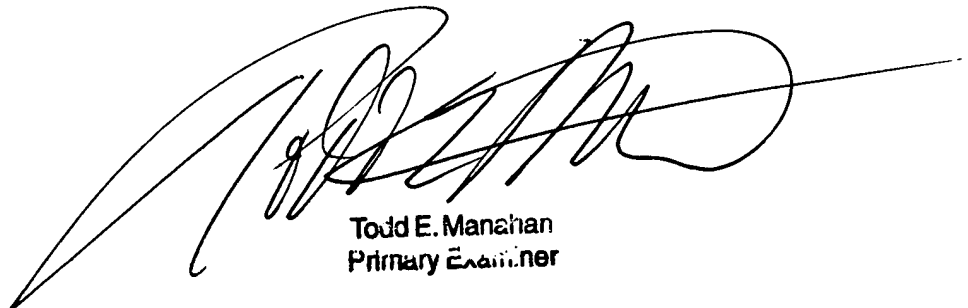
The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Candice C. Stokes



Todd E. Manahan  
Primary Examiner